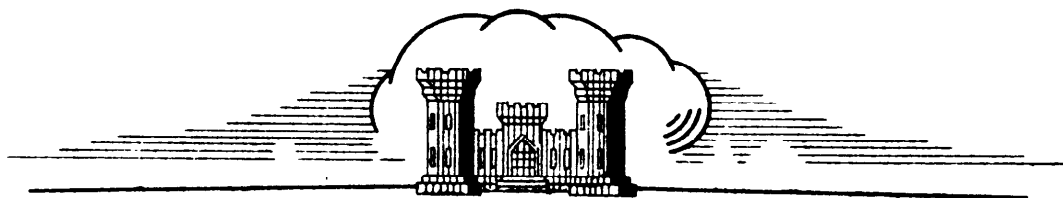


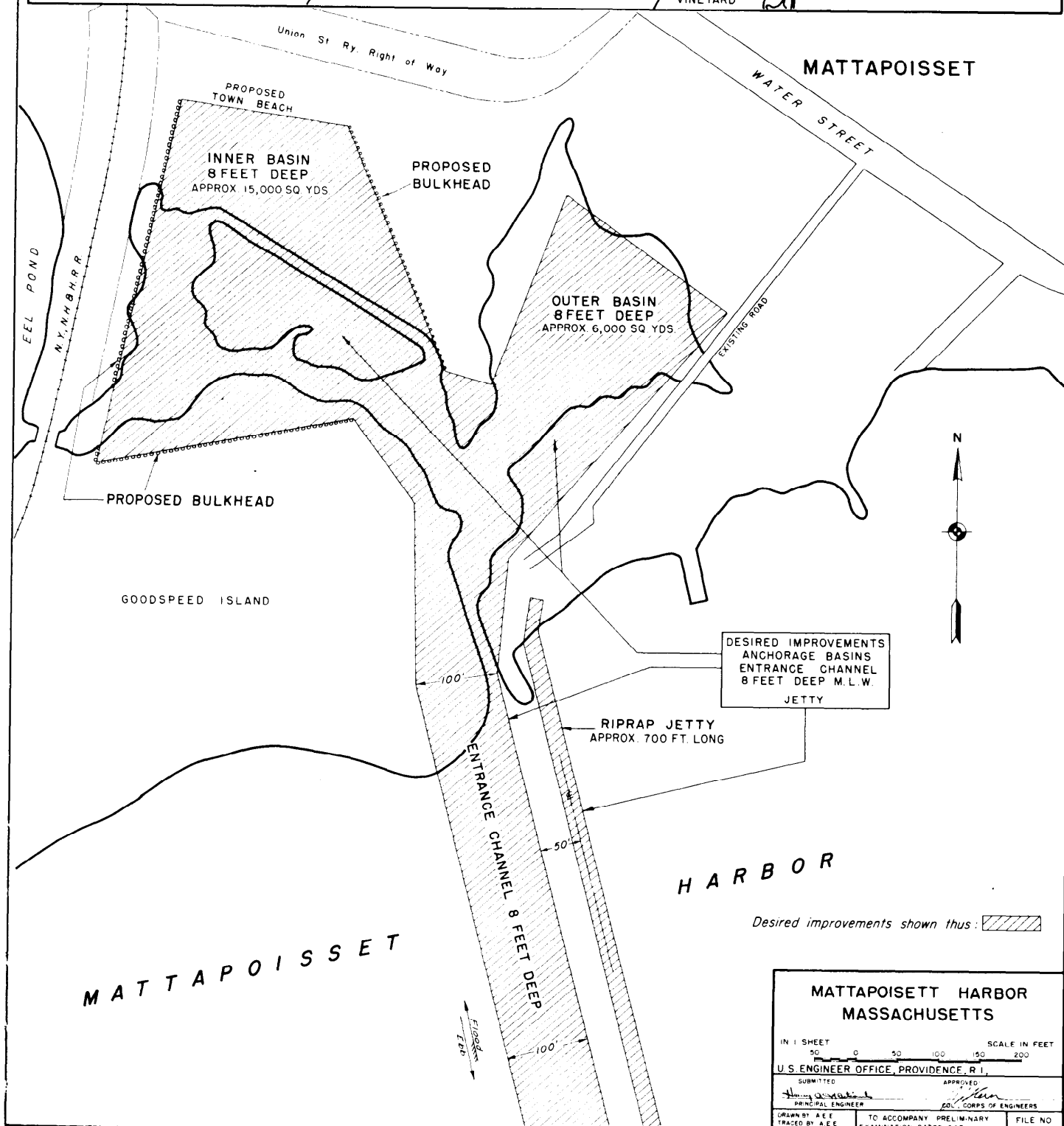
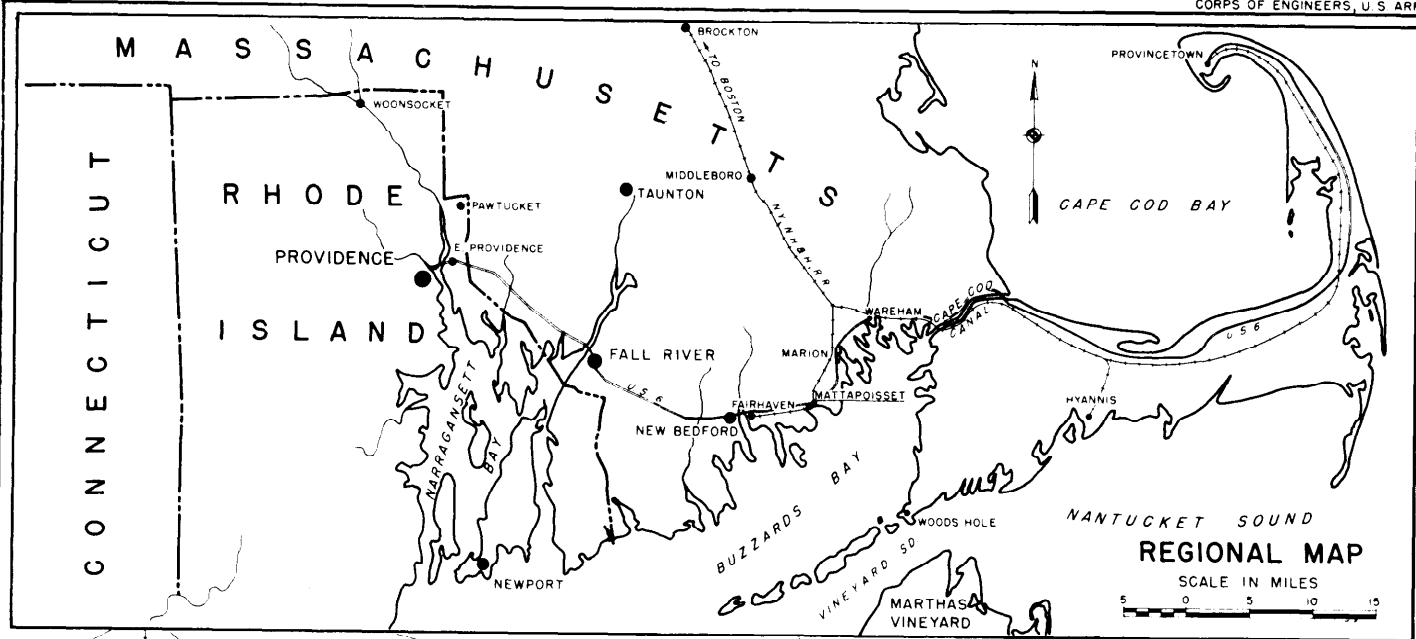
MATTAPOISETT HARBOR MASSACHUSETTS

PRELIMINARY EXAMINATION



UNITED STATES ENGINEER OFFICE
PROVIDENCE, RHODE ISLAND

15 OCTOBER 1945



MATTAPOISETT HARBOR MASSACHUSETTS	
IN 1 SHEET	
SCALE IN FEET	
U. S. ENGINEER OFFICE, PROVIDENCE, R. I.	
SUBMITTED	
APPROVED	
PRINCIPAL ENGINEER	
201, CORPS OF ENGINEERS	
DRAWN BY A. E. E.	
TO ACCOMPANY PRELIMINARY	
CHECKED BY A. E. E.	
EXAMINATION DATED OCT. 15, 1945	
FILE NO. BB 150	

NOT FOR PUBLIC RELEASE

WAR DEPARTMENT
UNITED STATES ENGINEER OFFICE
PROVIDENCE, RHODE ISLAND

15 October 1945.

Subject: Preliminary Examination of Mattapoissett Harbor, Massachusetts.

To: The Division Engineer, New England Division, Boston, Mass.

SYLLABUS

The District Engineer finds that improvement of the anchorage basin at the entrance to Eel Pond is worthy of further consideration. He recommends a survey to determine the cost and justification of a suitable improvement and the extent of local cooperation to be required.

AUTHORITY

1. This report on preliminary examination of Mattapoissett Harbor, Massachusetts is submitted in compliance with Departmental direction based on the item in section 6 of the River and Harbor Act approved March 2, 1945 which reads as follows:

"Mattapoissett, Massachusetts"

DESCRIPTION

2. Mattapoissett is a town in southeastern Massachusetts located about 50 miles south of Boston, Massachusetts. Mattapoissett Harbor is located immediately south of the village and is formed by an indentation in the coastline on the northwest side of Buzzards Bay. Its entrance lies about six miles east of New Bedford and Fairhaven Harbor and about seven miles southwest of the western end of Cape Cod Canal. The harbor faces southeast and is about 1-1/2 miles wide between Angelica Point on the east and Mattapoissett Neck on the west. It extends about 2-1/2 miles inland from a line connecting these points. Except for rocky shoals at the entrance, the greater portion of the harbor has natural depths in excess of 12 feet. A small tidal lagoon, named Eel Pond, is connected with the main harbor by a narrow opening which lies at the western end of the village. The main harbor is exposed to storms from the south through the east which create difficul-

ties for small craft. The mean tidal range is about 3.9 feet. The harbor is shown on U. S. Coast and Geodetic Survey Charts 249 and 1210, and on Plate 1 (File No. E. B. 150) and Figures 1 and 2 (File No. B. B. 151) accompanying this report. No prior reports concerning this locality have been submitted, and no works of improvement have been accomplished by the United States.

TRIBUTARY AREA

3. The area tributary to Mattapoissett Harbor comprises the Town of Mattapoissett, consisting of Mattapoissett Village and several small beach resorts. In 1940 the Town of Mattapoissett had a population of 1682. This population is considerably increased during the summer season, as the town is a summer resort of some note. Boating is one of the main attractions. The total property valuation of the town in 1941 was \$3,936,300. There is no manufacturing. The immediate area is primarily agricultural. Cranberries are grown in the vicinity. The town is served by a branch line of the New York, New Haven and Hartford Railroad but practically all freight moves by truck. United States Route No. 6, the main highway between Providence, Rhode Island and Cape Cod, passes about one-half mile north of the business center.

BRIDGES

4. The entrance to Eel Pond at the head of the harbor is crossed by a fixed bridge owned by the New York, New Haven and Hartford Railroad Company. There is no record showing departmental approval of plans for this bridge. Clearances are not known.

OTHER IMPROVEMENTS

5. There have been no major improvements by local interests. A wood pile bulkhead has been constructed on the east side of the entrance to Eel Pond in an effort to stabilize the channel. No apparent success has resulted from this project. The bulkhead is in poor condition. The cost of this work is unknown. No other improvements benefiting general navigation have been accomplished.

TERMINAL AND TRANSFER FACILITIES

6. There is one landing, owned by the town, open free of charge to the public. This landing includes a float with storage space for skiffs and is located on the Town Wharf. Fuel and water services were formerly available at this wharf. These services were destroyed in the hurricane of 1944, but the town has appropriated funds for their restoration. The Town Wharf is used also for the receipt of a small quantity of fish, and the receipt and shipment of small quantities of bulk freight. No transfer facilities are available. There are no other public terminals. There are several private small-boat piers, not open to the public. One marine service and storage yard with a 6-ton capacity marine railway is located at the head of the harbor. A marine engine repair service operates nearby. Several boat yards are located in Aucoot Cove, east of the main harbor.

7. Local interests feel that additional wharfage facilities and another boat repair yard will be required if the proposed improvements are authorized. Their plan of improvement includes bulkheads to provide the additional wharfage. Ample unused frontage is available for future requirements.

IMPROVEMENT DESIRED

8. A public hearing held at Mattapoisett on June 23, 1945 was attended by about 60 people including a Congressman, State and Town officials and local residents. The harbor committee, representing the Town of Mattapoisett, requested the improvement of the natural basin lying between Eel Pond and the main harbor. The desired improvement consists of dredging an area of approximately 21,000 square yards to 8 feet below mean low water for anchorage purposes, an entrance channel of the same depth 100 feet wide, and a stone jetty about 700 feet long on the east side of the entrance. It is proposed to construct approximately 1200 linear feet of bulkhead along the perimeter of part of the proposed basin for wharfage purposes. These desired improvements are shown on the accompanying map, Figure 2.

9. In justification of the proposed works, local interests cited the popularity of the town and harbor among local and transient yachtsmen, and stated that the harbor provides insufficient protection for small craft. The value of the proposed basin for refuge was cited. No definite offers of local cooperation were made, but it was indicated that the town and the Commonwealth of Massachusetts were prepared to contribute to the cost of the improvements, in addition to providing necessary spoil areas for dredged material.

COMMERCE

10. There are no available records to indicate the amount of commerce in the harbor. A small amount of cordwood and coal is shipped to Cuttyhunk and Nantucket Islands annually. In addition to this a small quantity of fish and shellfish is landed at the Town Wharf.

11. Local interests believe that the proposed improvements would greatly stimulate the pleasure boat activities of the harbor, with a consequent increase in retail business of about \$12,500 annually, and an additional increase in the boatyard business of about \$40,000. A spokesman for the Massachusetts Department of Conservation stated that the improvements would probably result in doubling the quantity of shellfish taken from Eel Pond, which is now valued at about \$25,000 annually.

VESSEL TRAFFIC

12. No record of the movement of fishing vessels to and from the harbor is available. The local fleet of about 50 pleasure craft makes use of the harbor. The maximum length of these ships is about 45 feet and the greatest draft about 4 feet. During the summer season this fleet is augmented by many transient craft. It is expected that completion of the proposed improvements will result in a large increase in the number, size and draft of both local and transient craft using the harbor.

DIFFICULTIES ATTENDING NAVIGATION

13. The depth of water in the main harbor is sufficient for the

type of boats using it. Lack of sheltered anchorage area makes the harbor dangerous for small craft during southerly storms. The small basin at the entrance to Eel Pond has insufficient depth at the entrance to permit navigation except at high tide. There are no other difficulties attending navigation in the harbor.

WATER POWER AND OTHER SPECIAL SUBJECTS

14. There are no questions of water power or flood control pertinent to this report. The effect of the proposed jetty would be negligible insofar as concerns erosion or accretion on the adjacent shoreline. Prospective use of the harbor as a seaplane base would not be adversely affected by the proposed improvements.

15. A small acreage of land would be reclaimed by the deposition of dredged material on the tidal flats adjacent to the proposed basins. Certain areas have been tentatively offered for the deposition of this material. The only apparent advantage in this minor land reclamation is the removal of the unsightly mud flats, and a consequent increase in property values.

DISCUSSION

16. Mattapoissett Harbor was used by yachtsmen for many years prior to the war. Its spacious harbor and lack of commercial traffic enhanced its attractions. It is situated close to the sheltered waters of Buzzards Bay which attract large numbers of sailing and other pleasure craft. Aerial photographs made in 1937 reveal that over 500 pleasure craft were anchored in four harbors, all of which are within 25 miles by water from Mattapoissett.

17. Facilities at Mattapoissett have never adequately met the requirements of yachtsmen. Although the harbor is sheltered from northerly and westerly storms, no protection is available from the severe southerly gales. The proposed improvements would provide a land-locked anchorage for shelter of small craft. The proposed bulkhead would provide ample berthing space.

18. Local interests state that the local fleet was largely destroyed by the hurricanes of 1938 and 1944. The remaining boats number about 50, valued at \$50,000. It is expected that the proposed basin improvement will provide the stimulus for a large increase in this number. Local interests estimate that during the summer season about 500 craft of various sizes would visit the harbor, if the proposed improvements are provided. The expected increase in local business through the sale of supplies and boat repair work is estimated to total at least \$52,500. In addition, local interests expect that the improvement will assist in the growth of the shellfish business, the anticipated increase in value being between \$25,000 and \$50,000 annually. These estimated benefits appear conservative. In addition some increase in property value may be expected to accrue through land reclamation and the opening of a right-of-way to Goodspeed Island.

19. In addition to the direct benefits cited by local interests, the proposed improvements would provide certain intangible benefits to general navigation. A reasonable need exists for a small harbor of refuge for pleasure craft in this locality. The proposed improvement would provide a safe harbor for approximately 100 small craft. The proposed improvements would also stimulate the boat building and servicing industries. These benefits plus the more tangible benefits discussed in the preceding paragraph appear sufficiently large to warrant further consideration of the desired improvements.

20. Of the foregoing benefits, the improved prosperity of the tributary area resulting from the expansion of recreational activities is local in character. The use of the proposed basin for refuge, the growing importance of boating for recreation, and the widespread benefits accruing to the various allied industries and services which this navigation supports, are general benefits. As general benefits are insufficient to warrant improvement entirely at Federal expense, local cooperation should be required.

21. The full improvement proposed by local interests may not be necessary to secure the benefits desired. The necessary length of the

jetty cannot be determined until a survey is made. The bulkhead desired by local interests will have no particular value to general navigation other than providing convenient berthing space. Federal participation in this part of the proposed work is not anticipated. Its construction by local interests might be considered as fulfillment of a part of any local cooperation that may be required, as its construction would tend to decrease the cost of future maintenance through elimination of inflow of sand from the shores of the basin, as well as provide for disposal of dredged material. Additional cooperation in cash should be required to total at least 50 percent of the total cost of the work.

CONCLUSIONS

22. Prospective small-boat navigation in Mattapoisett Harbor warrants further consideration of the improvements desired by local interests. An improvement of moderate extent at the entrance to Eel Pond, to include dredging of the entrance channel and basin, and stabilization of the entrance by a short jetty, will probably result in benefits in excess of annual charges. Local cooperation in amount of at least 50 percent of the cost of the project should be required. Such cooperation toward a suitable project is practically assured. The Town of Mattapoisett appears sufficiently interested in the improvement to provide its share of the required cooperation, and the State has a long established policy of assisting the towns on navigation improvements.

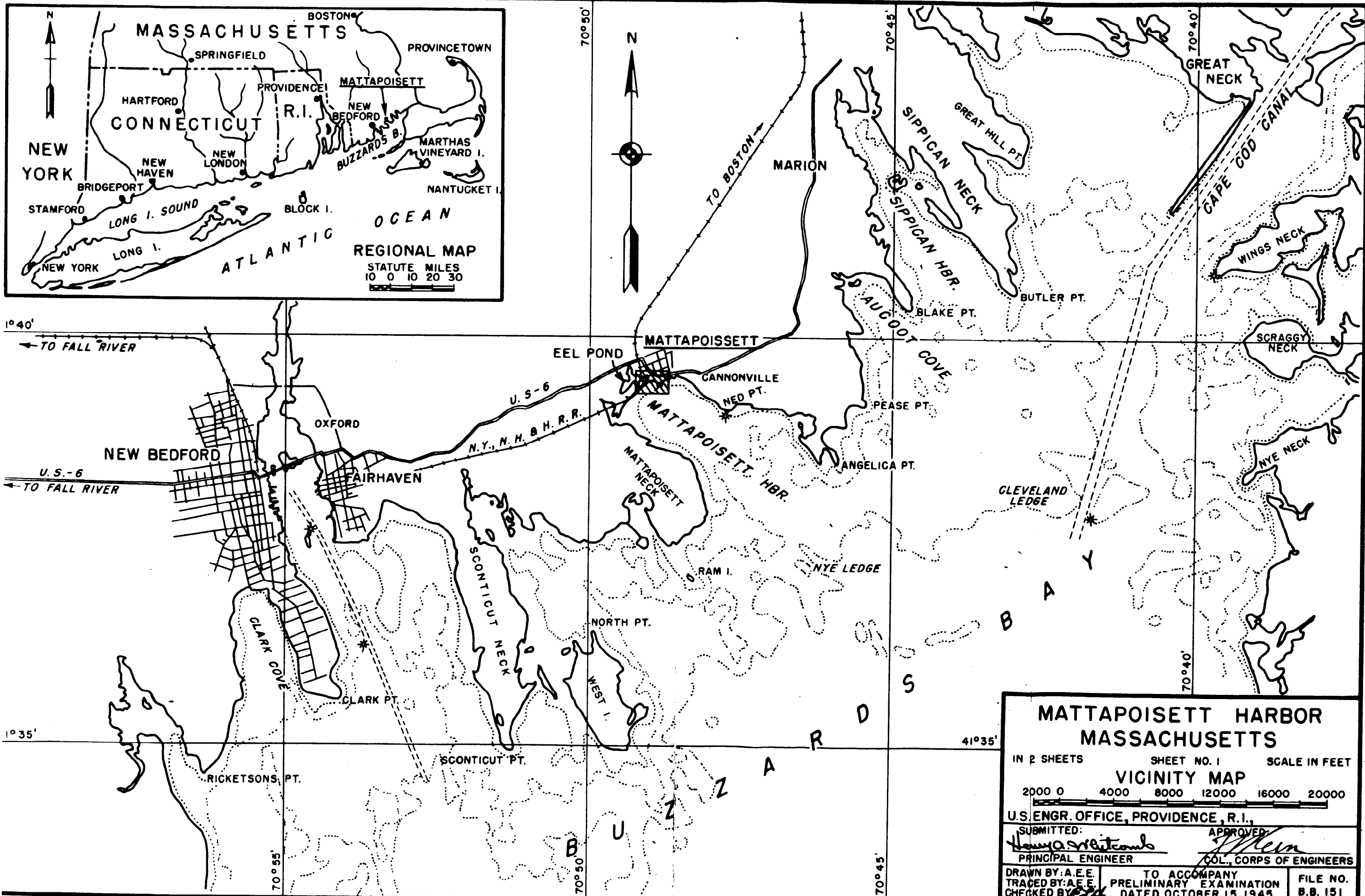
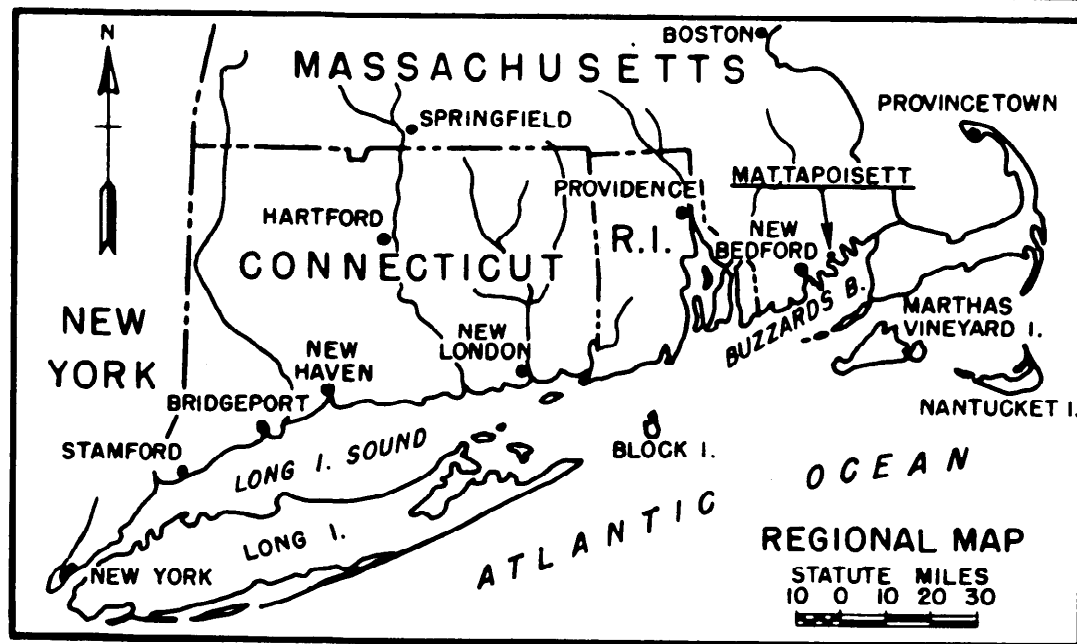
RECOMMENDATION

23. It is recommended that a survey be made to determine the cost and justification of a suitable protected anchorage in the basin at the approach to Eel Pond, with suitable entrance channel and jetty, and the extent of local cooperation to be required.

T. F. KERN
Colonel, Corps of Engineers
District Engineer

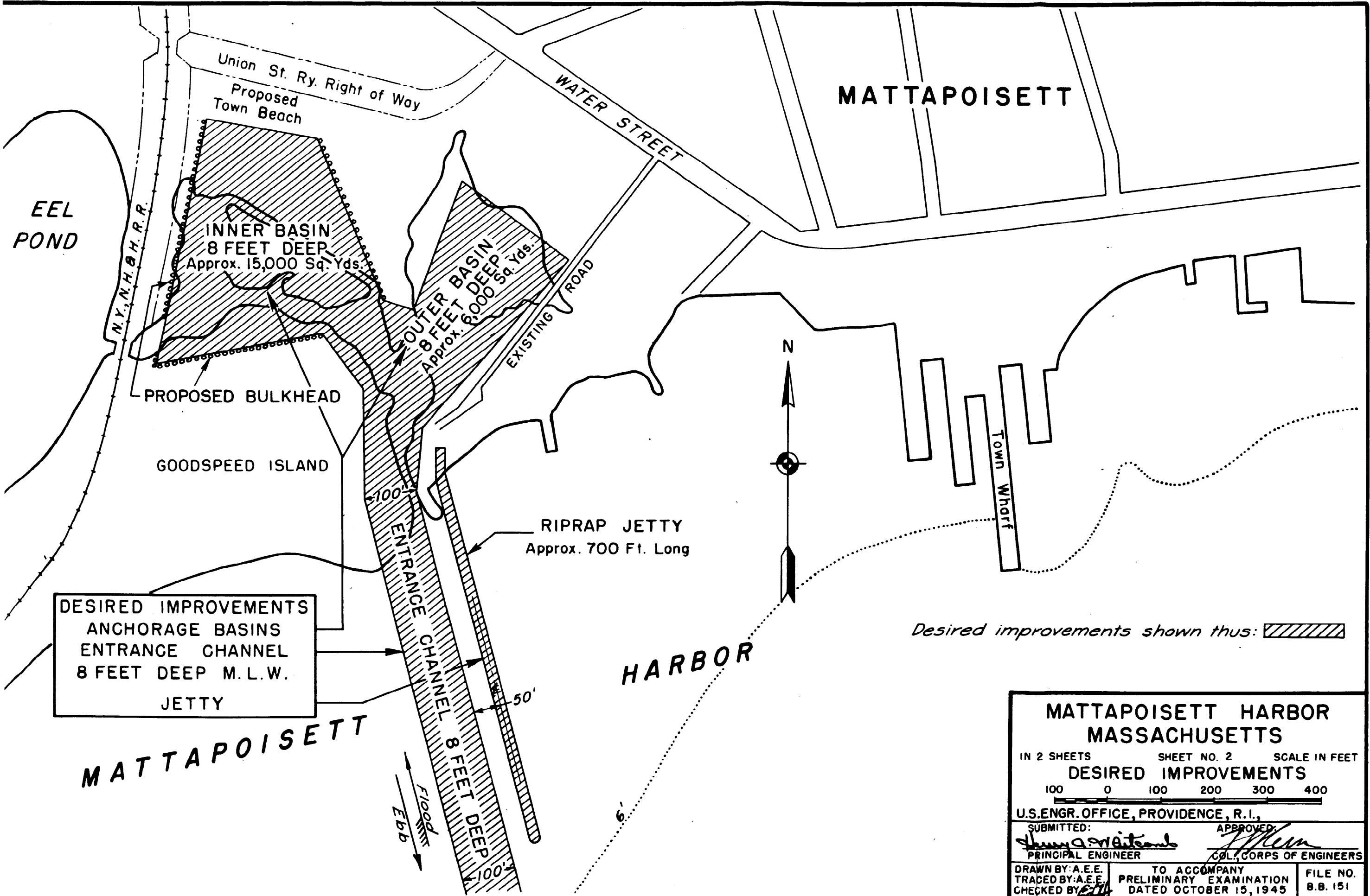
3 Inclosures:

- #1 - Plate 1, File No. B.B. 150
- #2 - Fig. 1, File No. B.B. 151, Sheet 1
- #3 - Fig. 2, File No. B.B. 151, Sheet 2
(Under separate cover Record of Hearing,
in triplicate, tracings of B.B. 150 and
B.B. 151, Sheets 1 and 2)



MATTAPoisETT HARBOR MASSACHUSETTS		
IN 2 SHEETS	SHEET NO. 1	SCALE IN FEET
2000 0 4000 8000 12000 16000 20000		
U.S. ENGR. OFFICE, PROVIDENCE, R.I.		
SUBMITTED:	APPROVED:	
<i>Henry A. Whitcomb</i>	<i>W. H. Mearns</i>	
PRINCIPAL ENGINEER	COL., CORPS OF ENGINEERS	
DRAWN BY: A.E.E.	TO ACCOMPANY	FILE NO.
TRACED BY: A.E.E.	PRELIMINARY EXAMINATION	B.B. 151
CHECKED BY: <i>W. H. Mearns</i>	DATED OCTOBER 15, 1945	

FIGURE 1.



Desired improvements shown thus: 



MATTAPOISETT HARBOR MASSACHUSETTS		
IN 2 SHEETS	SHEET NO. 2	SCALE IN FEET
100 0 100 200 300 400		
U.S. ENGR. OFFICE, PROVIDENCE, R.I.		
SUBMITTED:  PRINCIPAL ENGINEER		APPROVED:  COL, CORPS OF ENGINEERS
DRAWN BY: A.E.E.	TO ACCOMPANY PRELIMINARY EXAMINATION DATED OCTOBER 15, 1945	FILE NO. B.B. 151

FIGURE 2